

REMARKS

The present amendment is submitted in an earnest effort to advance the case to issue without delay.

Claim 1 has been amended to specify that the ratio of hydroxycarboxylic acid to salt ranges from 100:1 to 1:1. Support may be found in the specification at page 8, lines 16-17. Furthermore, claim 1 now focuses upon the specific taurate copolymer which is an acryloyldimethyl taurate/vinyl pyrrolidone copolymer. Support is found at page 5, lines 7-8. New claim 9 finds support at page 8, line 17.

The specification has been amended as suggested by the Examiner to specifically claim the benefit of the Provisional application. Reference to the claim for priority has been placed directly under the title.

Claims 1-3 and 6-8 were rejected under 35 U.S.C. § 102(e) as anticipated by Beerse et al. (U.S. Patent 6,294,186). Applicants traverse this rejection.

Beerse et al. has an Example 3. Therein is disclosed a hand sanitizer that includes 1% salicylic acid and 2% Aristoflex® AVC at a pH of 3.

Amended claim 1 specifies that the hydroxycarboxylic acid and salt thereof are present in a relative molar ratio of 100:1 to 1:1. There is no explicit or inherent disclosure in Example 3 of Beerse et al. that the hand sanitizer includes a hydroxycarboxylic acid to salt thereof molar ratio of 100:1 to 1:1. It is noted that salicylic acid is described under

Example 3 in its acid form with nothing mentioned about a salt form. Adjustment by NaOH/HCl to a particular pH is not an indication that the hydroxycarboxylic acid converts even partially to a salt form. Accordingly, novelty is not lacking.

Claims 4 and 5 were rejected under 35 U.S.C. § 103(a) as unpatentable over Beerse et al. (U.S. Patent 6,294,186). Applicants traverse this rejection.

Applicants have conducted a number of comparative experiments. Attention is drawn to Tables II-IV. Viscosities were measured on formulations with various thickeners, at several low pH levels in the presence of glycolic acid and an ammonium salt thereof. Among the group of thickeners tested were Simulgel® EG, Simulgel® NS and Aristoflex® AVC. The Simulgel® copolymers are formed from acryloyldimethyl taurate monomer units. These are types of taurate copolymers. Sepigel® 305 is a polyacrylamide crosslinked with 2-acrylamido-2-methylpropane sulfonic acid. Evident from Table II-IV is that taurate copolymers such as Simulgel® EG and NS as well as Sepigel® 305 with taurate crosslinkage are substantially inferior to Aristoflex® AVC.

Furthermore, Aristoflex® AVC remains proportionately relatively robust in viscosity even when glycolic acid is partially present as a salt form. Compare Table III and IV against Table II. Synthalen® CR has a viscosity close to Aristoflex® AVC in Table II. However, once salt forms of glycolic acid are introduced, this thickener (which is the only other viable thickener of the group) performs relatively poorly in comparison to the Aristoflex® AVC.

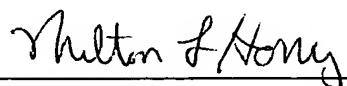
Not all taurate polymers perform equally well. This is especially so in the presence of salt forms of hydroxycarboxylic acids. The results with Aristoflex® AVC were unexpected. Beerse et al. unlike the claimed invention, remains silent in its disclosure as to any viscosity building benefits of one thickener over another. This reference in the Table at column 48, lines 8-9 equates Sepigel® 305 with that of Aristoflex® AVC. Applicants have shown a very substantial benefit over Sepigel® 305. It is particularly evident in situations where the hydroxycarboxylic acid to salt thereof molar ratio is 100:1 to 1:1. Beerse et al. does not reveal that ratio or identify the particular effectiveness of Aristoflex® AVC. Furthermore, Beerse et al. does not discuss the specific problem associated with building viscosity in hydroxycarboxylic acid systems. For all these reasons, the reference would not render the claims obvious.

Although not directly cited against the claims, the Examiner has discussed Griat (U.S. Patent 5,863,545). This reference was said to disclose an oil-in-water emulsion of pH no higher than 3.5 formulated with an acrylamide copolymer. The ratio of acrylamide to 2-acrylamido-2-methylpropanesulfonic acid (AMPS or taurate) was cited as being in a ratio between 85:15 and 15:85. The patent was further cited for disclosing alpha-hydroxy acids such as glycolic and lactic acids.

Unlike the claims, Griat does not disclose the particular taurate copolymer of amended claim 1. Neither is there any disclosure of the claim required molar ratio of 100:1 to 1:1 of hydroxycarboxylic acid to salt thereof. Indeed, all the Examples appear to be exclusively in the acid form of the hydroxycarboxylic acid. The reference neither discloses nor renders the instant invention obvious.

In view of the foregoing amendment and comments, applicants request the Examiner to reconsider the rejection and now allow the claims.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Milton L. Honig", written over a horizontal line.

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